



**ORIGINAL RESEARCH PAPER**

**Management**

**CUSTOMERS' SATISFACTION WITH APPLICATION BASED BANKING: AN EMPIRICAL STUDY OF UDAIPUR CITY**

**KEY WORDS:** Application Based Banking, Customers' Satisfaction, Udaipur

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**ABSTRACT**

In the present era, Technology is affecting both qualitatively and quantitatively life of each and every one. The exponential growth of information technology has touched the lives of millions of people and introduced major changes in the worldwide economic and business atmosphere. The developments in the banking technology have speeded up the banking communication and transactions for clients via various apps of banking so keeping this in view this research has been conducted to study the customers' satisfaction with application based banking. The data has been collected from 300 customers with the help of semi structured questionnaire and it has been concluded that majority of customers were satisfied with application based banking services in Udaipur city.

**Introduction:**

The exponential growth of information technology has touched the lives of millions of people and introduced major changes in the worldwide economic and business atmosphere. The incremental growth in the Smartphone development and its number of users gave an idea of choosing such topic for the study. Indian users can easily download the banking apps for various banks which is widely available in Google Play Store for android users and Apple App Store for iPhone users. It increases the convenience for customers when they want to access their bank account in order to make payment and other banking activities. The number of Smartphone users was at 36% at the end of 2020 and continue increasing quickly. According to an internet survey conducted by Nielsen in 2011, two out of every five people in India used Smartphone with Internet access for different purposes. Currently (2020) data shows that India has more than 1.5 billion mobile users out of which more than 448 million people have mobile with internet and it is contentous growing. However, the concept of mobile banking service was new at that time and not many banks have their mobile banking apps available until 2013. In addition, the number of banks, which have their mobile banking apps available for Smartphone users, does not receive many positive feed backs from their customers. Moreover, the significant number of their customers is unaware of mobile banking apps in application stores, such as Google Play Store and Apple Apps Store. The mobile banking apps allow customers to connect directly to the bank server via internet connection on mobile devices.

**Literature Review**

Rajaratnam, A. (2020) attempted to "investigate impact of E-service quality and interaction effect of gender on customer satisfaction from mobile banking services. This study concluded that there is a strong positive relationship and the impact on customer satisfaction due to the e-service quality. But the moderating role of gender tends to become insignificant. Thereby it can be concluded that banking strategies need not to be focused separately on each gender instead whole respondents can be viewed as a whole without any gender-based groups. But improving EService quality will have significant positive impact on customer satisfaction on mobile banking services."

Khan, M. Y., Javeed, A., Mehmood, N., & Khan, W. (2019) aimed to find "the nexus between customer satisfaction and mobile banking service quality among Pakistani users. The structured questionnaire has been administered to 400 mobile banking users in Rawalpindi, Islamabad and Wah Cantt. Simple random sampling was used to gather the

respondents for data collection. The analysis showed that there exists a positive association between the dimensions of assurance, tangibility as well as responsiveness with customer satisfaction. However, there exists no relationship between empathy and reliability with customer satisfaction."

B. Arthi and E. Kavitha (2018) have studied "A Study on Customer Satisfaction towards Mobile Banking. In the emerging technology the banks marked around the globe by Mobile banking (m-banking). Banks conduct financial services through wireless and instant as per the convenience of customers between smart phone and tablet The influence of Mobile banking towards the customer satisfaction is the purpose of this research and also identify the key factors of mobile technology. Mobile banking is the interface between financial services and telecoms".

Simplice A. Asongu, Nicholas M Odhiambo (2017) has studied "Mobile Banking Usage, Quality of Growth, Inequality and Poverty in Developing Countries. A study which enquire into the relationship between mobile banking & inclusive development that includes quality of growth, in equality and poverty; The conclusion that can be drawn out is that mobile banking application will play a supreme role in responding to the problems of deficient growth, inequality & poverty of the developing countries".

This study by Bharti (2016) showed that "Effective distinctiveness, professed security, immense efficacy, Innovative virtual environment, Enhanced Personalization and Improved timely updates were not associated with satisfaction related to mobile banking while Supportive access is an important factor directly associated with user satisfaction related to mobile banking. This study focused on the effect of mobile banking on the satisfaction of customers that are using the service. The study only focused on features of e-banking on customer expectations and satisfaction. Compared to other studies, this study only looked at e-banking features and not really factors of mobile banking. It also shows that to fulfill expectations, banks should increase mobile banking awareness".

The study of Jannat and Ahmed (2015) revealed that "the most influential factors that have an influence on customer satisfaction of mobile banking of second-generation banks. From the analysis of collected data it has been revealed that; security and trust, convenience accuracy of transaction, ease of use, system availability, responsiveness, transaction speed, and cost effectiveness are the most influential factors for customer satisfaction. It was found that, a strong relationship exists between customer satisfaction and the nine

independent variables. Each and every variable (independent) has power for customer satisfaction. Compared to the previous studies, these nine variables also show positive relationships with the dependent variable (customer satisfaction) and it is not assured that these are the only determinants of mobile banking. The study did not develop a model to determine the significance of the study”.

**OBJECTIVE**

The purpose of this research paper is to identify customers' satisfaction with Application Based Banking Services.

**HYPOTHESES**

The study proposes to test following hypotheses:

**H<sub>0</sub>1:** Customers are not satisfied with Application Based Banking Services.

**H<sub>1</sub>1:** Customers are satisfied with Application Based Banking Services.

**H<sub>0</sub>2:** There is no impact of demographic variables on customers' satisfaction with Application Based Banking Services.

**H<sub>1</sub>2:** There is significant impact of demographic variables on customers' satisfaction with Application Based Banking Services.

**Research Methodology**

**(a) Research Design:** - To have a better understanding about the issue descriptive research design was used. To get the primary data close ended questionnaire was administrated.

**(b) Sample Design:** - 300 banking customers who are using the Application Based Banking Services were selected through stratified purposive sampling from Udaipur City

**(c) Analysis:** - The data collected was analyzed with the help of Arithmetic mean, t-test and ANOVA.

**Analysis & Interpretations**

**Demographic Profile of Customers:**

The table 1 is presenting the demographic profile of customers, it can be observed that 56% respondents (N=168) were male and 49% customers were aged between 20 to 40 years. Majority of respondents (N=196, Percentage=65.33) were residing in urban area and 38.33% customers (N=115) were graduate. Highest number of customers (N=175, Percentage=58.33) were married. 72.24% respondents (N=229) are having their bank accounts in both public and private banks and majority of respondents (N=170, Percentage=56.67) use application based banking on their own from the very first day.

**Table 1: Demographic Profile of Customers**

Gender	N	Percentage	Marital Status	N	Percent age
Male	168	56.00	Unmarried	175	58.33
Female	132	44.00	Married	110	36.67
Total	300	100	Divorced	10	3.33
Age	N	Percentage	Widow	5	1.67
Below 20 Years	78	26.00	Total	300	100
20-40 Years	147	49.00	Qualification	N	Percent age
40-60 Years	59	19.67	Undergraduate	108	36.00
Above 60 Years	16	5.33	Graduate	115	38.33
Total	300	100	Postgraduate	60	20.00

Area	N	Percentage	Other	17	5.67
Urban	196	65.33	Total	300	100
Rural	104	34.67	Type of Bank	N	Percent age
Total	300	100	Only Public	89	29.67
Mode of Using Application Based Banking	N	Percentage	Only Private	68	22.67
By your own (from start)	170	56.67	Only Rural	7	2.33
Initially with others help but later by Own	63	21.00	Only Co-operative	6	2.00
With help of branch staff	31	10.33	Both Public & Private	111	37.00
With help of relative or known	36	12.00	Public, Private and Rural	9	3.00
Total	300	100	Public, Private, Rural and Co-operative	10	3.33
			Total	300	100

**Customers' Satisfaction with Application Based Banking Services**

To investigate customers' satisfaction with Application Based Banking Services, respondents were given a list of App based banking factors and they were asked to indicate the level of satisfaction on 5 point scale ranging from 5 (Highly Satisfied) to 1 (Highly Dissatisfied). The table 2 is presenting the Bank Customers' Satisfaction with Application Based Banking Services. It can be seen that bank customers were highly satisfied with fund transfer (Mean=4.24) and recharge facility (Mean=4.21), whereas they have indicated satisfaction with all other application based banking services. From the mean score analysis it can be concluded that overall bank customers were least satisfied with donation services (Mean=3.48) followed by Demat account service (Mean=3.57) and customer care service (Mean=3.63).

**Table 2: Bank Customers' Satisfaction with Application Based Banking Services**

Application Based Banking Services	Mean	S.D.	C.V.	Satisfaction Level
Fund Transfer (Within and outside the bank)	4.24	0.90	0.21	Highly Satisfied
Immediate Payment Services (IMPS)	4.10	0.94	0.23	Satisfied
e-Deposits (SB/FD/RD/PPF etc.)	4.00	0.96	0.24	Satisfied
Bill Payments (Electricity/Water/Credit card/Insurance etc)	4.13	1.00	0.24	Satisfied
Top up & Recharge (Mobile/DTH etc)	4.21	0.96	0.23	Highly Satisfied
Ticket Booking (Movie/Airline/Railway etc.)	4.00	0.97	0.24	Satisfied
Balance Enquiry and e-passbook	4.14	0.96	0.23	Satisfied
Cheque book request	3.83	1.03	0.27	Satisfied

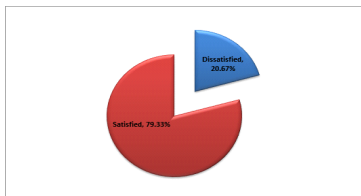
Stop Cheque request	3.75	1.02	0.27	Satisfied
Mini statement	3.98	0.96	0.24	Satisfied
ATM card/Debit Card Hotlisting	3.90	1.04	0.27	Satisfied
Donations	3.48	1.10	0.32	Satisfied
Shopping	3.90	1.01	0.26	Satisfied
Demat account service	3.57	1.06	0.30	Satisfied
Customer care service	3.63	1.03	0.28	Satisfied
Mutual Fund	3.77	1.12	0.30	Satisfied
FAST TAG	3.78	1.18	0.31	Satisfied

The Overall satisfaction of bank customers with application based services is presented in table 3. It was found that 79.33% bank customers (N=238) were satisfied with application based banking services whereas 20.67% customers (N=62) were dissatisfied. The mean score (60.53) indicated that bank customers were satisfied with application based banking services.

**Table 3: Bank Customers' Overall Satisfaction with Application Based Banking Services**

Overall Satisfaction	N	Percentage
Dissatisfied	62	20.67
Satisfied	238	79.33
Total	300	100
Mean Score	60.53	
Result	Satisfied	

**Figure 1: Bank Customers' Overall Satisfaction with Application Based Banking Services**



Further to measure difference in customers' overall satisfaction with application based banking with respect to their demographic variables, t-test and ANOVA test was applied and results received are presented in table 4 and 5. According to t-test results of table 4 there is a no significant difference in customers' satisfaction towards application based banking with respect to their gender and area of residence

The table 5 is presenting the ANOVA results to measure significant difference in customers' satisfaction with application based banking with respect to their age, marital status, qualification, and type of bank account. It can be observed that the F-statistic is significant for age, marital status and qualification, so it has been concluded that respondents' age, marital status and qualification affect their satisfaction towards application based banking.

The table 6 is presenting the mean scores of customers' satisfaction towards application based banking with respect to their age, marital status and qualification. It can be seen that customers of 40-60 years age (Mean=67.53) were highly satisfied with application based banking services and the case is same for divorced customers (Mean=66.80) and professionally qualified customers (Mean=73.00).

**Table 4: t-Test results to measure difference in Overall Customers' Satisfaction towards Application based banking with respect to their demographics**

Demographic Variable	Satisfaction with Application Based Banking		t-value	p-value	Result
	Mean	S.D.			

Gender	Male	60.18	21.39	0.316	0.752	Not Significant
	Female	60.97	21.73			
Area of Residence	Urban	61.47	21.45	1.059	0.29	Not Significant
	Rural	58.71	21.71			

Level of Significance=5%

**Table 5: ANOVA Test results to measure difference in Overall Customers' Satisfaction towards Application based banking with respect to their demographics**

Demographi	Source of Variation	Sum of Squares	Degree of Freedom	Mean Sum of Squares	F-Ratio	p-value	Result
Age	Between Samples	4261.01	3	1420.337	3.135	0.026	Significant
	Within Samples	134123.7	296	453.120			
	Total	138384.7	299				
Marital Status	Between Samples	6628.64	3	2209.547	4.964	0.002	Significant
	Within Samples	131756	296	445.122			
	Total	138384.7	299				
Qualification	Between Samples	5877.607	3	1959.202	4.377	0.005	Significant
	Within Samples	132507.1	296	447.659			
	Total	138384.7	299				
Type of Bank Account	Between Samples	344.817	3	114.939	0.246	0.864	Not Significant
	Within Samples	138039.8	296	466.351			
	Total	138384.7	299				

Level of Significance=5%

**Table 6: Mean Scores of Overall Customers' Satisfaction with Application based banking**

Demographic Profile	Mean Score	
Age	Below 20 Years	56.83
	20-40 Years	59.39
	40-60 Years	67.53
	Above 60 Years	63.25
Marital Status	Unmarried	56.78
	Married	66.23
	Divorced	66.80
	Widow	54.20
Qualification	Up to Higher Secondary	55.60
	Graduate	62.11
	Post Graduate	62.85
	Other	73.00

**Conclusion:**

- From this research following conclusions have been drawn:-
1. The customers were highly satisfied with fund transfer and top up or recharge facility on application based banking, whereas they are satisfied with all other parameters.
  2. Overall majority of customers are satisfied with Application Based Banking Services.
  3. The Customers' Satisfaction with online shopping was significantly different with respect to their age, marital status and qualification.

**REFERENCES:**

1. Arthi, B. & Kavitha, E. (2018) A Study on Customer Satisfaction towards Mobile Banking, , International Journal of Computer Sciences and Engineering, Volume-6, Special Issue-2, March 2018.
2. Bharti M (2016) Impact of Dimensions of Mobile Banking on User Satisfaction. Journal of Internet Banking and Commerce. <http://www.icommercecentral.com/open-access/impact-of-dimensions-of-mobile-banking-on-user-satisfaction.pdf>
3. Jannat M, Ahmed I (2015) Factors influencing customer satisfaction of mobile banking services: a study on second - generation banks.
4. Khan, M. Y., Javeed, A., Mehmood, N., & Khan, W. (2019). "Mobile Banking Service Quality and Customer Satisfaction: An Application of Carter Model." Sarhad Journal of Management Sciences, 5(1), 15-26.
5. Rajaratnam, A. (2020). "The Effect of E-Service Quality on Customer Satisfaction and the Moderating Role of Gender: Banking Sector Trincomalee, Sri Lanka."
6. Simplice A. Asongu, Nicholas M Odhiambo (2019), Mobile Banking Usage, Quality of Growth, Inequality and Poverty in Developing Countries.